

ZHUKOV, V.N., red.; SOKOLINSKIY, I.Ye., tekhn. red.

[In battles with ice] V ledovykh boiakh. Moskva, Izd-vo
gazety "Krasnaia zvezda," 1962. 31 p. (Bibliotekha
"Krasnoi zvezdy," no.1(85)) (MIRA 15:5)
(Lenin (Atomic ship))

USSR / Farm Animals. Moneybee.

Q-7

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64583

Author : Zhukov, V. N.

Inst : Not given

Title : Nectar-Productiveness of Buckwheat in After-Harvest Crops

Orig Pub : Pchelovodstvo, 1957, No. 12, 40-41

Abstract : In after-harvest seedings, the buckwheat flowers in August and in the first half of September, when the season of extreme hot weather and drought have already passed. It was established that one buckwheat plant in after-harvest seeding secretes 21% more sugar than in spring seeding.

Card 1/1

DZHUMAYEV, F.T.; ZHUKOV, V.P.

Preliminary data on the physical development of children in
the eastern Pamirs. Zdrav. Tadzh. 10 no.3:6-8 '63.

(MIRA 17:4)

(A, N)
L 1331-66 EWT(1)/T IJP(c) ENS/GW
ACCESSION NR: AP5020411

UR/0375/65/000/000/0025/0031

AUTHORS: Zhukov, V. P. (Colonel); Pivnev, V. I. (Major)

TITLE: Aerial reconnaissance supporting an amphibious operation

SOURCE: Morskoy sbornik, no. 8, 1965, 25-31

TOPIC TAGS: aerial photograph, aerial reconnaissance, amphibian operation,
photographic reconnaissance, radar reconnaissance

ABSTRACT: Amphibious operations were studied on the basis of U.S. experiences in World War II. The general reconnaissance requirements for each operation are the same, requiring close coordination of the various air arms of all the services. Prior to the development of operational plans, the terrain must be surveyed, defensive installations detected, enemy disposition noted, supply and reserve potentials studied, etc. During transit of the landing force to the debarkation area, convoys must be protected, and enemy forces capable of interrupting the operation must be kept under surveillance. During the landing, aerial reconnaissance reports assist in controlling gunfire, organizing landing operations, and noting changes in the enemy's strength. To ensure that the necessary information is gathered and rapidly relayed to the commanders, an aerial

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L 1331-66

ACCESSION NR: AP5020411

reconnaissance force should be assembled, and a communication network established. Visual reconnaissance, chiefly used during the combat stage, provides speed and flexibility, but is limited by meteorological conditions and delivers only subjective reports, not documented material for later study. Aerial photography is useful during the planning stages. It permits detailed study, but the time delay in processing the photographs is a disadvantage during combat. Radar reconnaissance is useful during poor visibility operations, provides long range visibility, and is essential for detection of the enemy's electronic potential. Infrared reconnaissance has many advantages, its chief drawback being that its operation requires highly qualified specialists.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MS

NO REF SOV: 000

OTHER: 000

mlr
Card 2/2

L 31270-66 EWT(m)/EWP(j) RM

ACC NR: AP6022802

SOURCE CODE: UR/0079/66/036/002/0310/0314

50
B

AUTHOR: Pudovik, A. N.; Fayzullin, E. M.; Zhukov, V. P.

ORG: Kazan' State University (Kazanskiy gosudarstvennyy universitet)

TITLE: Cyclic esters of unsaturated phosphinic acids

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 310-314

TOPIC TAGS: esterification, cyclic group, organic phosphorus compound, chlorinated organic compound, isomerization, molecular structure, chemical decomposition, phosphinic acid

ABSTRACT: A series of alkylenglycol-beta-chloroalkyl esters of phosphorus acid were prepared in high yields by the action of chlorides of alkylenglycolphosphorous acids on ethylene oxide, propylene oxide, and glycerol epichlorohydrin. The cyclic esters of phosphorous acid added sulfur when heated to 100-110°, being converted to esters of thiophosphoric acid. Thermal isomerization (180-200°) of alkylenglycol-beta-chloroalkyl esters of phosphorous acid yielded alkylenglycol esters of beta-chloroalkylphosphinic acids. An Arbuzov rearrangement also occurred upon heating of the cyclic phosphites with alkyl halides. Treatment of the alkylenglycol esters of beta-chloroalkylphosphinic acids with triethylamine in benzene solution with heating resulted in splitting off hydrogen chloride, and formation of alkylenglycol esters of vinyl- and propenylphosphinic acids. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 08Mar65 / ORIG REF: 005

Card 1/1 22

UDC: 547.26'118

0915

0781

BEGIDZHANOV, M.G., rel.; ZHUKOV, V.P., red.; LOSEV, A.G., red.

[Scientific organization of labor in working areas;
practice of the collectives of the Ural Chemical
Machinery Plant and other enterprises of the Central Urals]
Nauchnaya organizatsiia truda na rabochikh mestakh; opyt
kollektivov Uralkhimmashzavoda i drugikh predpriatii Sred-
nego Urala. Moskva, Profizdat, 1965. 198 p.

(MIRA 18:8)

BR

ACCESSION NR: AP4024724

S/0109/64/009/003/0429/0433

AUTHOR: Zhukov, V. P.

TITLE: Dispersion of the number of zeros in the sum of a harmonic signal and a narrow-band noise

SOURCE: Radiotekhnika i elektronika, v. 9, no. 3, 1964, 429-433

TOPIC TAGS: harmonic signal, noise, narrow band noise, axis crossing count

ABSTRACT: The dispersion of the number of axis crossings for a Gaussian process with no signal present was considered by H. Steinberg, et al. (J. Appl. Phys., 1955, 26, 2, 195). In the present article, the dispersion is estimated in T-duration realizations of a harmonic signal plus a fluctuation noise concentrated in a narrow band around the signal frequency. The dispersion formulas for large and small signal-to-noise ratios are developed in terms of the energy spectrum of the phase derivative of the sinusoidal-signal-plus-narrow-band-noise combination.

Card 1/2

ACCESSION NR: AP4024724

Some results obtained with the new formulas are compared and found to be in good agreement with the accurate results obtained by H. Steinberg for a bell-shaped noise spectrum. Orig. art. has: 2 figures and 18 formulas.

ASSOCIATION: none

SUBMITTED: 26Jan63

DATE ACQ: 10Apr64

ENCL: 00

SUB CODE: CO

NO REF SOV: 001

OTHER: 007

Card: 2/2

ZHUKOV, V.P.

Systematic noise produced errors of an electronic-digital frequency
meter. Izv.vys.ucheb.zav.; radiotekh. 7 no.6:732-738 N-D '64.
(MIRA 18:4)

DROVYASHIN, B.V.; ZHUKOV, V.P.

Signal-to-noise ratio at the output of a beat detector. Izv. vys.
ucheb. zav.; radiotekh. 7 no. 6: 756-760 N-D '64.

(MIRA 18:4)

ZHUKOV, V.P.

Dispersion of the number of zeroes in narrow-band normal noise
with finite duration. Radiotekh. i elektron. 10 no.5:839-843
My '65. (MIRA 18:5)

ZHUKOV, V.P., polkovnik

Characteristics of conducting air reconnaissance in theaters of naval
operations. Mor. sbor. 47 no.1;26-30 Ja '64. (MIRA 1867)

ZHUKOV, V.P.; LEONT'YEV, P.A.; KHRIPUSHIN, Z.V.; VOROTNIKOVA, R.V.,
red.; BERNGARDT, N.Ye., tekhn. red.

[Manual for joiners and carpenters] Spravochnik stoliara i plot-
nika. Voronezh, Voronezhskoe knizhnoe izd-vo, 1962. 271 p.
(MIRA 16:3)

(Carpentry)

ZHUKOV, Vasilii Pavlovich; GUROV, S., red.; POKHLEBKINA, M.,
tekhn. red.

[Public bureau of economic analysis. Bureau of economic
analysis staffed with volunteers] Obshchestvennoe ekono-
micheskoe biuro. Moskva, Moskovskii rabochii, 1963. 66 p.
(MIRA 16:7)

(Industrial management)

ZHUKOV, V.P., inzh.

Graphical method for locating the place of damage in overhead
communication lines. Avtom., tselm.i svyaz' 4 no.3:30-32 Mr
'60. (MIRA 13:7)

1. Novokuznetskaya distantziya signalizatsii i svyazi Tomskoy
dorogi. (Electric lines--Overhead)

ZHUKOV, V.P., inzh.

Mechanized line for mass production of planed pieces. Der.prom. 7
no.9:20-21 S '58. (MIRA 11:11)

1. Voronezhskiy inzhenerno-stroitel'nyy institut.
(Planing machines)

ZHUKOV, V.P.

Dispersion of the number of zeroes in the sum of a harmonic signal
and narrow-band noise. Radiotekh. i elektron. 9 no.3:429-433
Mr '64. (MIRA 17:4)

~~ZHUKOV, V.P.~~ Inzhener.

Panel-type doors with hollow cores. Dor. prot. 6 no. 7:22-23 J1 '57.
(MLPA 10:8)

1. Seletskiy demonstratsionnyy kombinat.
(Doors)

ZHUKOV, V.P., inzhener.

Using pneumatic processes in simultaneous action composite dies.
[Izd.] LONITOMASH vol.40:171-177 '56. (MLRA 10:4)
(Dies (Metalworking)) (Pneumatics)

ZHUKOV, V.P.

Probability density of the phase sum derivatives of a sinusoidal
signal and Gaussian noise. Radiotekh. i elektron 7 no.7:1244-
1246 '62. (MIRA 15:6)
(Electronics) (Information theory) (Radio)

ZHUKOV, Vasilii Pavlovich; TRUSIKHIN, Nikolay Pavlovich; CHERNOV, Ia.,
red.; PAVLOVA, S., tekhn.red.

[New wage system; practice of the Perovo Experimental Plant of
Metallurgical Machinery Manufacture] Novye uslovia oplaty truda;
opyt Perovskogo eksperimental'nogo zavoda metallurgicheskogo ma-
shinostroeniia. Moskva, Mosk.rabochii, 1960. 65 p.

(MIRA 13:9)

(Perovo--Machinery industry) (Wage payment systems)

ZHUKOV, V.P.

Probability density of the derivative of phase sum of a narrow-band
signal and gaussian noise. Radiotekh. i elektron. 9 no.9:1691-1694
S '64. (MIRA 17:10)

ZHUKOV, V.P.

Effect of the volumetric weight of wood particle boards on
the difference in their thickness. Der.prom. 14 no.11:12-14
N '65. (MIRA 18:11)

1. Voronezhskiy lesotekhnicheskiy institut.

ACC NR. AP5025070

SOURCE CODE: UR/0286/65/000/016/0130/0130

AUTHOR: Zhukov, V. P.

ORG: none

TITLE: Device for coupling of ships. Class 65, No. 174082

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 130

TOPIC TAGS: ship coupler, coupling device

ABSTRACT: This Author Certificate presents a device for coupling of ships which contains a pivoted hook and a horizontal bar (see Fig. 1).

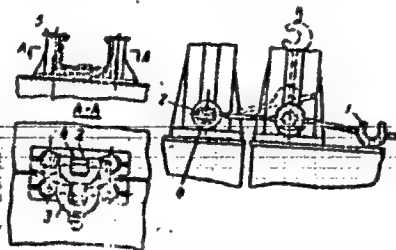


Fig. 1. 1 - Hook; 2 - horizontal bar; 3 - slotted bar; 4 - flats; 5 - posts.

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UDC: 629.12.015

ACC NR: AP5025070

To simplify construction, the hook is made from a bifurcated plate rigidly attached to a horizontal movable bar. The central section of the bar has flats which allow mating with the hook of the other ship and which lock the hook into place after rotation of the bar. The ends of the bar are mounted in the vertical slots of two posts which are placed on the edge of the ship and which are also used as cleats. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 25Oct63

Card 2/2pw

ZHUKOV, V.S.; KORSHUN, L.L.; MOROZOVA, S.S.; NOTKIN, M.M.

Well-covering mat finish of furniture. Der. prom. 12 no.12:
16-17 D '63. (MIRA 17:3)

SOV/123-59-16-64435

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 16, p 114 (USSR)

AUTHOR: Zhukov, V.S.

TITLE: An Automatic Line for the Grinding of Halls for Engine Cylinders

PERIODICAL: Avtostroitel' (Sovnarkhoz Gor'kovsk. ekon. adm. r-na) 1958, Nr 3 (38)
15 - 16

ABSTRACT: The superiority of using automatic lines, consisting of five multipurpose centerless grinding machines, when machining hulls of engine cylinders, is noted. There is a prism in front of the first machine on which the worker puts the part. From the machine the part proceeds to a similar prism and is pushed out onto 2 long conic rollers, by means of which it is moved to the following machine. 1 drawing.

M.I.V.

Card 1/1

ZHUKOV, V.S.

Use of electronic-acoustical and radiometric methods in studying the properties of sea ice. Probl.Arkt.i Antarkt. no.2: 83-93 '60. (MIRA 13:6)

(Sea ice--Testing)

ZHUKOV, V.S. (Moskva)

Stability of some electrical systems. Izv. AN SSSR. Energ. i
transp. no.3:26-30 My-Je '65.

(MIRA 18:12)

1. Submitted June 30, 1964.

3/112/59/000/012/078/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, pp. 221-222, # 25439

AUTHORS: Krylov, N.A., Zhukov, V.S.

TITLE: Application of Gamma-Rays to the Quality Control of Building Materials

PERIODICAL: Byul. tekhn. inform. po str-vu. Glavleningradstroy pri Lengorispolkome, 1958, No. 1, pp. 17-19

TEXT: A combined use of accoustic, vibration and radiometrical methods of control enables one to widen essentially their field of application. The measurement of attenuation of a collimated beam of Co^{60} gamma-rays with an activity of 12 millicuries (at all measurements the energy of gamma-quanta must be within 0.5-2.0 mev) passing through material enables one to judge on the quality of concrete filling of structures as well as to control physico-chemical processes taking place in concrete during its hardening. The intensity of gamma-beam changes essentially during the first 6-8 days (due to dehydration) and afterwards it changes

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S/112/59/000/012/078/097
A052/A001

Application of Gamma-Rays to the Quality Control of Building Materials

slightly (due, as assumed, to the formation of crystalline lattice). From the attenuation of radiation a notion as to the composition of concrete can be formed. A block diagram, graphs and a photo of the installation are given. ✓

L.A.R.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

S/128/60/000/010/011/016/XX
A033/A133

AUTHORS: Sankov, I. I.; Zibenberg, A. I., and Zhukov, V. S.

TITLE: Overall mechanization and automation of the cleaning of castings

PERIODICAL: Liteynoye proizvodstvo, no. 10, 1960, 23 - 26

TEXT: The authors describe a number of semi-automatic cleaning machines developed and put in operation at the Gor'kovskiy avtomobil'nyy zavod (Gor'kiy Automobile Plant) for the mechanized cleaning of castings. All these machines are the result of systematic research work which has been carried out at the Plant since 1948. The semi-automatic for the emery-grinding of valve seats fitted in the cylinder blocks of the 9M3 (YamZ), GAZ-21 (GAZ-21), GAZ-69, GAZ-51 and "Moskvich 407" engines does away with the overheating of these valve seats (weighing 46, 28 and 18 grams) which occurred formerly during manual grinding. The semi-automatic has a capacity of 1,450 pieces/hour. The abrasive wheel has a speed of 136 rpm. The semi-automatic for the emery-grinding of the inner periphery of piston rings for deburring consists of the grinding head, bed with drive and swivel mechan-

Card 1/2

S/128/60/000/010/011/016/XX

Overall mechanization and automation of the... AO33/A133

ism. The authors describe the design and operation of this machine and point out that for gang operation all parts are classified in nine groups, the characteristic feature of each group being its surface to be emery-ground. The specific amount of labor consumption of emery-grinding of these groups is 65 .. 75% of the total labor consumption of machining the castings after cleaning them in drums and shotblast installations. The semi-automatic for the emery-grinding of the lower and upper cylinder block surfaces, i.e. cylinder faces, valve apertures, gear box surfaces and crank bearings, possesses two 37 kw motors of 1,500 rpm. The grinding wheels have a speed of 950 rpm. The authors give a brief description of the machine operation. The semi-automatic for the emery-grinding of three transmission case surfaces is intended for the removing of foundry gates and deburring. The casting is set by hand in the fixture on the machine carriage, automatically clamped and, together with the carriage, carries out reciprocating movements. The semi-automatic has three motors of 28 kw, 1,500 rpm, for the grinding heads and one 2.8 kw motor of 1,000 rpm for the feed. The feed speed during the machining is 4.3 m/min. The capacity of this semi-automatic is 120 pieces/hour, the overall dimensions 2,160 x 2,565 x 2,275 mm. There are 7 figures.

Card 2/2

SANKOV, I.I.; ZIBENBERG, A.I.; ZHUKOV, V.S.

Over-all mechanization and automatization for the cleaning of castings.
Lit. proizv. no.10:23-26 O '60. (MIRA 13:10)
(Foundries--Equipment and supplies) (Automatic control)

ZHUKOV V.S.

KRZLOV, N.A., kand. tekhn. nauk: ZHUKOV, V.S., inzh.

Using gamma rays for controlling the quality of building materials.
Bul. tekhn. inform. 4 no.1:17-19 Ja '58. (MIRA 11:2)
(Gamma rays) (Building materials--Testing)

ZHUKOV, V.V.

The GPs-2 caterpillar dump trailers. Biul. tekhn.-ekon. inform.
no.1:69-70 '57. (MIRA 11:4)

(Caterpillar tractors--Trailers)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

1ST AND 2ND ORDERS PRECISES AND PROPERTIES INDEX 10% AND 4% PROCESS

ZHUKOV, V-V.
CA

Sensitization of antimony-cadmium photocathodes by sulfur and selenium. V. V. Zhukov. *J. Tech. Phys.* (U. S. S. R.) 9, 376 (1939). The integral sensitivity is several times higher than that of usual Sb-Cd cathodes. It changes with wave length and the applied voltage as does the sensitivity of untreated cathodes. J. J. H.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

AND SO A METALLOGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

ZHUKOV, V. V.

AUTHORS: Artsimovich, L. A., Shchepkin, G. Ya., Zhukov, V. V., 89-12-1/29
Makov, B. N., Maksimov, S. P., Malov, A. P., Nikulichev, A. A.,
Panin, B. V., Brezhnev, B. G.

TITLE: Electromagnetic Isotope Separating Device for Heavy Elements of
High Resolving Power. (Elektromagnitnaya ustanovka s vysokoy razreshayushchey siloy dlya razdeleniya izotopov tyazhelykh elementov)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 12, pp. 483-491 (USSR)

ABSTRACT: The constructed apparatus, which shall be able to separate clearly isotopes even with a relative mass difference of 1/240, must have a high dispersion, a high resolving power and especially well stabilized magnetical and electrical fields. An axial-symmetrical field, the dispersion of which is proportional to the square of the focusing angle, was used as a magnetic field. The focusing angle is 225°. The measured dispersion of the apparatus amounts to 20 mm at a relative mass difference of the masses to be separated of 1%.
The stabilization of the magnetic field of the separating device has been brought to 0,005% by the aid of a valve scheme. The acceleration velocity for the source of ions (up to 40 kV) is stabilized by a double cascade scheme up to 0,01%. But also the current in the discharge source of ions is stabilized. The vacuum chamber is constructed from stainless steel, in a C-shape. The

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Electromagnetic Isotope Separating Device for Heavy Elements of 89-12-1/29
High Resolving Power.

pump system has been arranged so that a working vacuum of $4-6 \cdot 10^{-6}$ mm Hg is always guaranteed. When separating toxic materials moving locks, valves and regulators from synthetic and rubber are applied. The high vacuum here is maintained by means of a surge chamber.

A normal gas discharge source of ions, in which the material to be separated can be heated up to 1000°C , is used as source of ions.

Boxes from copper or graphite are usually used as targets. The following results were obtained:

Concentration factor:

75 to 302	for Pb^{208}	concentrated from the natural lead-isotope mixture
22 to 71	for Pb^{207}	"
151 to 214	for U^{238}	concentrated from natural uranium
985 to 1420	for U^{236}	"
1000	for Pu^{239}	concentrated from samples of different isotope compositions
190 to 300	for Pu^{240}	"

Card 2/3

Electromagnetic Isotope Separating Device for Heavy Element of 89-12-1/29
High Resolving Power.

160 to 360 for Pu²⁴¹ concentrated from samples of
different isotope compositions

There are 4 tables, 8 figures and 3 Slavic references.

SUBMITTED: August 21, 1957

AVAILABLE: Library of Congress

Card 3/3

SOV/120-58-2-9/37

AUTHORS: Zhlukov, V. V. and Semashko, N. N.

TITLE: Stabilisation of Magnetic Fields Using a Cathode Ray Tube
(Stabilizatsiya magnitnykh poley s pomoshch'yu elektronno-luchevoy trubki)

PERIODICAL: Priory i Tekhnika Eksperimenta, 1958, Nr 2, pp 41-44
(USSR)

ABSTRACT: A method has been developed for the stabilisation of a magnetic field using a CRO tube. The method has been used over a number of years and has proved satisfactory. It consists of the following: A usual CRO tube (Fig.1) is placed in the leakage field of an electro-magnet which is accurately compensated by a constant field of opposite sign. Both fields are normal to the axes of the tube. Thus a smallest change in the magnetic field in the gap of the electro-magnet which, of course, also leads to a change in the leakage field deflects the electron beam to either side depending on the sign of the change. The electron beam is modulated in intensity and special plates are deposited on the inner surface of the screen of the tube. These plates are arranged symmetrically about the axis and signals from the plates depend on the position of the beam on them. When the beam passes symmetrically, the amplitudes of the signals

Card 1/2

SOV/120-58-2-9/37

Stabilization of Magnetic Fields Using a Cathode Ray Tube.

from the plates are equal, while with the smallest deflection a difference in the amplitudes appears and can be used as the stabilizing signal. A full description is given of the necessary circuitry and the method of producing the compensating constant magnetic field. A stability of $\sim 0.005\%$ has been achieved corresponding to mains voltage changes of 20%. A continuous regulation of the field up to 30% of maximum is possible. The following persons are thanked for help and interest: G. Ya. Shchepkin, S. P. Maksimov and Yu. D. Pigarov. There are 4 figures.

SUBMITTED: July 9, 1957.

Card 2/2

1. Magnetic fields--Stabilization
2. Stability--Control
3. Cathode ray tubes--Applications

ZHUKOV, V. V. Cand Tech Sci -- (diss) "Study of ~~the~~ manifestations of mountain pressure during the mining of thick gently ~~down~~-sloping coal ^{basins} strata by inclined layers and ~~going through~~ ^{at} the full thickness." Mos, 1958.
14 pp (Min of Higher Education USSR. Mos Mining Inst im I. V. Stalin),
120 copies (KL, 13-58, 96)

ZHUKOV, V.V., inzh.

Calculating the manifestation of rock pressure in slicing thick
flat seams with roof caving. Nauch.dokl. vys. shkoly; gor. delo
no.3:78-84 '58. (MIRA 11:9)

1. Predstavlena kafedroy razrabotki plastovykh mestorozhdeniy
Moskovskogo gornogo instituta imeni I.Y. Stalina.
(Mining engineering) (Subsidence (Earth movements))

ZHUKOV, V.V., inzh.

Deciding on the spacing between slices in working thick flat seams
with roof caving. Izv.vys.ucheb.zav.; gor.zhur. no.6:3-7 '58.
(MIRA 12:1)

1. Moskovskiy gornyy institut.
(Mining engineering)

ZHUKOV, V.V., gornyy inzh.

Investigating mining systems suitable for thick level seams. Ugol'
33 no.3:10-14 Mr '58. (MIRA 11:3)

1. Moskovskiy gornyy institut.
(Coal mines and mining)

VOROB'YEV, Boris Mikhaylovich, kand.tekhn.nauk; ZHUKOV, V.V., otv.red.;
IL'INSKAYA, G.M., tekhn.red.

[Filling operations in coal mines] Zakladochnye raboty v ugol'-
nykh shakhtakh. Moskva, Ugletekhizdat, 1959. 62 p.

(MIRA 12:10)

(Mine filling)

KRYLOV, Vladimir Fedorovich, inzh.; PLESHAKOV, Grigoriy Yekovlevich,
kand.tekhn.nauk; VOROB'YEV, Boris Mikhaylovich, kand.tekhn.nauk;
ZHUKOV, V.V., otv.red.; SHKLYAR, S.Ya., tekhn.red.

[Working thick sloping coal seams] Iz opyta razrabotki moshchnykh
pologikh plastov. Moskva, Ugletekhizdat, 1959. 165 p.

(MIRA 12:12)

(Coal mines and mining)

ACCESSION NR: AT4024401

S/2529/61/000/066/0111/0116

AUTHOR: Zhukov, V. V.; Nilov, A. A.

TITLE: The surface layer radiographic investigation of some heat-resistant alloys after heat treatment in different gaseous media

SOURCE: Kazan. Aviatsonny*y institut. Trudy*, no. 66, 1961. Aviatsonny*ye dvigateli (Aircraft engines), 111-116

TOPIC TAGS: heat treatment, heat resistant alloy, nickel alloy, furnace, forging, drop forging, pitting, scale formation, metal loss, forging die, die, steel tool, machining, turbine blade, protective medium, argon, ammonia, nimonic alloy, roentgenography, muffle, furnace, microhardness, annealing

ABSTRACT: For the heating preparation of a heat-resistant nickel-base alloy, furnace equipment with overhead air is used in production before drop forging and during heat treatment. As a result, during extended heating of the pieces at sufficiently high temperature, a scale forms, and a pitting of the alloying elements takes place at their outer surface. Scale formation causes irreversible losses to the used scarce metals, reduces the life of the forging dies and high-speed, steel tools, and increases the volume of the required machining. For example, the technological allowance for final machining of a gas turbine blade, about

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ACCESSION NR: AT4024401

2-3 mm, is determined mainly by the depth of the defective layer arising as a result of the application of heat treatment. The volume of the blade machining necessary, because of such allowances, may constitute 20-30% of the total machining volume required by a gas turbine. Application of a protective gaseous media during heat treatment was suggested as a solution to the problem. However, there is lack of sufficient information on the protective properties of different gases. From data presented in earlier publications, it was found that besides argon, obtainable in limited quantities only, dissociated ammonia also exhibits satisfactory protective properties. No data were available from the literature on the depth of defective, surface-layer build-up when Nimonic-type alloys are heat treated in different gaseous atmospheres. Consequently, tests were performed by Yu. M. Lepilov (assistant) and several students of the Kazanskiy aviatsionnyy institut (Aviation Institute of Kazan), the results of which are reported by the authors. The tests consisted of roentgenographic investigation of two heat-resistant, nickel-base alloy samples: EI 437 B and EI 617 (see Table 1 of the Enclosure) after heat treatment in air, nitrogen, nitrogen + 10% hydrogen, and argon atmospheres. The sample blanks were cut from commercial bars and ground to size (40 x 13 x 7 mm). The heat treatment was performed in a muffle furnace (see Table 2 of the Enclosure). The nitrogen, argon, and nitrogen-hydrogen mixture were purified from oxygen and dried with silica gel. After heat treatment, the specimens were cut into two parts; one part of

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ACCESSION NR: AT4024401

each sample was investigated roentgenographically, and the other was tested for microhardness on the PMT-3 device at a load of 200 g. Radiography was performed on the URS 70 device, whereby a vacuum-annealed, copper foil 0.06 mm thick was glued to the test sample with cellulose, nitrate-base lacquer and used as a reference sample. The test sample was rotated in the device during roentgenography. Fixed on the radiographs were (024) lines of the reference foil and of the test specimen. The roentgenograms were evaluated on a recording microphotometer (modified MF-2). From the obtained photometric curves, the distance between the α_1 - components of the (024) — line doublet of the sample and the reference sample. From this distance the value of the lattice parameter was determined. The error in determining the parameter did not exceed ± 0.0005 kX (X = X-unit). Before each succeeding roentgenographic measurement, a thin surface layer was removed from the test sample. The consecutive removals of the surface layers were performed by 5 HNO₃ - 50 HCl - 45 H₂O etches, and the error of thickness measurements by the micrometer did not exceed 0.005 mm. Curves were plotted showing the results of the roentgenographic measurements (lattice parameter versus layer depth) and of microhardness versus layer depth. Both types of curves showed satisfactory consistency. It was found that in the surface layer of the samples the lattice parameter of the solid solution increased with the depth, indicating a pitting of the alloying elements (Al, Ti, Cr) in the outer portion of the surface layer. The depth of the defective layer was assumed to extend to the point from which a noticeable decrease of the lattice parameter and of the microhardness could be observed on the experimental curves.

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ACCESSION NR: AT4024401

The results representing the depth of the defective layer determined in the described way are shown in Table 3 of the Enclosure. These results do not differ substantially for both investigated materials. It must be noted that only the effect of heat treatment was investigated by the tests, while in conditions of production the heat treatment is preceded by a number of heatings applied between the press operations. Therefore, in practical cases, the depth of the defectuous layer can be expected to attain a 40-50% higher value. On the basis of the performed investigation, the use of a nitrogen atmosphere with 8-10% hydrogen addition was recommended as an inexpensive and sufficiently available protective medium at heat treatment of Nimonic-type, heat-resistant alloys. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: Aviatsionnyy institut, Kazan (Aviation Institute)

SUBMITTED: 10May61

DATE ACQ: 15Apr64

ENCL: 03

SUB CODE: MM, PR

NO REF SOV: 005

OTHER: 000

Card 4/7

ACCESSION NR: AT4024401

ENCLOSURE: 01

Type of alloy	Chemical composition in per cent												
	C	Si	Mn	Cr	Ni	Fe	Cu	Ti	Al	V	Mo	W	B
EI 437B	0.05	0.39	0.26	20.30	base	0.43	0.05	2.59	0.93	-	-	-	0.004
EI 617	0.07	0.43	0.35	15.15	base	1.40	0.08	1.84	1.89	0.24	3.64	5.38	0.005

Table 1. The chemical composition of tested alloys

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ACCESSION NR: AT4024401

ENCLOSURE: 02

Type of alloy	Soaking and quenching	Aging
EI 437B	800 C, 8 hrs; cooled with the muffle by shielding gas	700 C, 16 hrs; cooled in air
EI 617	800 C, 4 hrs; 1190 C, 2 hrs; cooled with the muffle	800 C, 16 hrs; cooled in air
	1050 C, 4 hrs; cooled with the muffle	

Table 2. Heat treatment of test specimens

Card 5/7

ACCESSION NR: AT4024401

ENCLOSURE: 03

Atmosphere	Air	Nitrogen	Nitrogen + 10% Hydrogen	Argon
Alloy	Depth of defectuous layer in mm			
EI 437 B	1.00	0.25	0.08	0.03
EI 617	1.00	0.25	0.07	0.04

Table 3. The depth of the defectuous layer after heat treatment

Card 7/7

ZHUKOV, V.V., kand.tekhn.nauk; OVCHINNIKOV, V.M.; LOKSHIN, Ye.L.;
ORLOV, G.V.

Effect of the displacement of rocks during gasification of a coal
seam in the Angren deposit on the disturbance of borehole casings
in underground gas generators. Nauch.trudy VNIIPodzemgaza no.10;
85-90 '63. (MIRA 17:5)

1. Laboratoriya gornogeologicheskaya, Angrenskaya stantsiya
"Podzemgaz".

ACCESSION NR: AT4035380

S/2529/63/000/074/0011/0015

AUTHOR: Zhukov, V. V.

TITLE: Kinetics of the formation of a stable phase in Ni-Ti alloys

SOURCE: Kazan. AviatSIONny*y institut. Trudy*, no. 74, 1963. AviatSIONnaya tekhnologiya i organizatsiye proizvodstva (Aeronautical technology and organization of production), 11-15

TOPIC TAGS: nickel, titanium, nickel titanium alloy, alloy phase formation, alloy stable phase, phase formation kinetics, alloy crystallization, titanium solubility

ABSTRACT: The increasing use of nickel-based heat-resistant alloys requires a deeper understanding of the nature and kinetics of crystallostructural transformations taking place during heat-treatment or prolonged service at elevated temperatures. The author points out the deficiencies in the phase diagram obtained for Ni-Ti by Vogel and Wallbaum, which showed that the solubility of Ti in Ni at 800C is 2.8 - 3.8 w/o (see Fig. 1 of the Enclosure), and reviews the work of subsequent investigators who tried to determine the solubility limit with greater accuracy by using purer Ti and assuming that this limit is determined by the appearance of stable phase particles in the structure. The kinetics of the formation of the metastable α' and stable β phase are also discussed on the basis of the work of

Card 1/3

ACCESSION NR: AT4035380

Taylor and Floyd (titanium solubility limit in nickel at 750 and 1050C = 9.4 and 13.0 at %, respectively) Bagariatskiy and Tyapkin, Pool and Hume-Rothery, and Zimina and Pridantsev. The author concludes that the transformation of the Ni-Ti solid solution takes place in two stages. First, due to diffusion of Ti atoms in the solid solution, small regions are formed with a composition close to Ni_3Ti but with a lattice similar to Ni_3Al . Later, in the regions enriched with Ti and enlarged in size to hundreds of \AA , the lattice structure changes from cubic to hexagonal, resulting in growth and separation of stable γ -phase particles. Thus, it has been established that the metastable ϵ' phase forms first. It is also concluded that it is more correct to determine the titanium solubility limit from the incipient formation of the metastable phase, rather than of the stable phase. Orig. art. has: 1 figure.

ASSOCIATION: Kazanskiy aviatsionnyy institut (Kazan Institute of Aviation)

SUBMITTED: 24Dec62

DATE ACQ: 22May64

ENCL: 01

SUB CODE: MM

NO REF SOV: 004

OTHER: 004

2/3

Card

ACCESSION NR: AT4035380

ENCLOSURE: 01

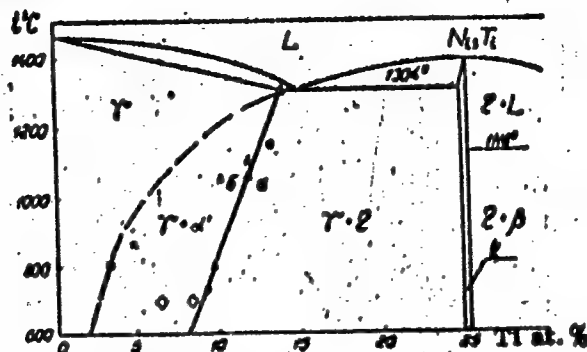


Fig. 1 - The Nickel corner of the Phase Diagram

Sources: ○ - Vogel and Wallbaum
● - Taylor and Floyd
△ - Bagaryatskiy and Tyapkin
△ - Pool and Hume-Rothery
◇ - Zimina and Pridantsev

Card 3/3

L 21982-66 EWT(1)

ACCESSION NR: AP5025994

UR/0294/65/003/005/0771/0774

536.422.1:546.78

81

AUTHOR: Marmer, E. N.; Zhukov, V. V.; Stukanov, A. F.

85

13

TITLE: Experimental determination of the durability of tungsten heaters in a vacuum at temperatures up to 3273 K

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 5, 1965, 771-774

TOPIC TAGS: tungsten, heating, temperature measurement, high temperature material, pyrometry, *vacuum, pyrometer, optic pyrometer, electric resistance, vaporization, testing engineering* / *TEPIR-010 pyrometer, OPPIR-010 optic pyrometer*

ABSTRACT: Object of the work was the determination of the service life of an industrial type tungsten heater in the temperature interval from 2273 to 3233 K. The heater had a diameter of 0.006 meters and a power requirement up to 220 kilowatts. The article shows a schematic of the test unit. It consists of a casing with a diameter of 1.1 meters and a height of 4.5 meters, a Type N-8T¹ diffusion pump and a Type VN-4G² mechanical pump which ensured a pressure of 1.33×10^{-2} newtons/m², and auxiliary electric equipment. The heater was fabricated from a rod of technical grade tungsten with a diameter of 6 mm, made by the methods of powder metallurgy. It consisted of three branches connected among

Card 1/2

L 21982-66

ACCESSION NR: AP5025994

themselves by a "star" scheme. During the experiments, the temperature was measured with a chromatic electronic pyrometer Type TsEPIR-010 and an optical pyrometer Type OPPIR -017. The temperature difference between the two instruments did not exceed 25 K. Test results show that the electric resistance of tungsten varies approximately according to a linear law due to its vaporization from the surface. Based on this fact, the rate of vaporization of tungsten was computed. Analysis leads to a calculated value for the vaporization rate of 1.38×10^{-4} kg/m²-sec at a temperature of 3233 K. Orig. art. has: 3 formulas and 4 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut elektrotermicheskogo oborudovaniya (All-Union Scientific Research Institute for Electrothermal Equipment)

SUBMITTED: 18Jul64

ENCL: 00

SUB CODE: 13,11,10/1

NR REF SOV: 003

OTHER: 004

Card 2/2

L 40854-66 EWP(e)/EWT(m)/EWP(v)/T WPA/HH

ACC NR: AP6004215

(A)

SOURCE CODE: UR/0331/65/000/010/0022/0024

AUTHOR: Zhukov, V. V.; Leonovich, I. I.; Davydulin, G. G.; Zhukov, A. V.

ORG: none*

TITLE: Binding materials used to reinforce surfaces of access roads in logging areas

SOURCE: Lesnaya promyshlennost', no. 10, 1965, 22-24

TOPIC TAGS: access road, soil property, soil consolidation, soil type

ABSTRACT: The article discusses studies conducted since 1960 by the Belorussian Transportation Institute ^{*} im. S. M. Kizov on the use of various types of roadbuilding and binding materials, e. g., gravel, cement, lime, etc., to reinforce the surfaces of dirt roads used primarily for the transportation of lumber in Belorussia. Studies of the physico-mechanical properties of soils treated by liquid bitumen, cement, lime, and peat show that a mixture of sandy soil and peat produces the highest degree of durability at a ratio of 30% peat to the weight of soil in dry weather conditions. This durability is increased by the addition of 15-20% of lime or 10-15% of cement, depending on the granulometric composition of the soil; when the soil is saturated by moisture, however, the durability considerably decreases. The greatest durability was obtained from the sand-gravel mixtures with a ratio of 40% of gravel to 50% of sandy soil. The

UDC: 634.383.4

Card 1/2

L 40854-66

ACC NR: AP6004215

use of various soils and binding materials in different ratios, their application on experimental roads and their durability and the various methods of roadbed preparation and access road construction are also discussed. Orig. art. has: 1 figure, 2 tables, 1 photograph.

SUB CODE: 13.22

SUBM DATE: none

Card 2/2 MLP

L 40854-66 EWP(e)/EWT(m)/EWP(v)/I WH/WH

ACC NR: AP6004215

(A)

SOURCE CODE: UR/0331/65/000/010/0022/0024

AUTHOR: Zhukov, V. V.; Leonovich, I. I.; Davydulin, G. G.; Zhukov, A. V.

29
B

ORG: none *

TITLE: Binding materials used to reinforce surfaces of access roads in logging areas

SOURCE: Lesnaya promyshlennost', no. 10, 1965, 22-24

TOPIC TAGS: access road, soil property, soil consolidation, soil type

ABSTRACT: The article discusses studies conducted since 1960 by the Belorussian Transportation Institute in. S. M. Kizov on the use of various types of roadbuilding and binding materials, e. g., gravel, cement, lime, etc., to reinforce the surfaces of dirt roads used primarily for the transportation of lumber in Belorussia. Studies of the physico-mechanical properties of soils treated by liquid bitumen, cement, lime, and peat show that a mixture of sandy soil and peat produces the highest degree of durability at a ratio of 30% peat to the weight of soil in dry weather conditions. This durability is increased by the addition of 15-20% of lime or 10-15% of cement, depending on the granulometric composition of the soil; when the soil is saturated by moisture, however, the durability considerably decreases. The greatest durability was obtained from the sand-gravel mixtures with a ratio of 40% of gravel to 50% of sandy soil. The

UDC: 634.383.4

Card 1/2

L 40854-66

ACC NR: AP6004215

use of various soils and binding materials in different ratios, their application on experimental roads and their durability and the various methods of roadbed preparation and access road construction are also discussed. Orig. art. has: 1 figure, 2 tables, 1 photograph.

SUB CODE: 13, *44*

SUM DATE: none

Cord *2/2 MLP*

ACC NR: AT6014328

SOURCE CODE: UR/2529/62/000/070/0053/0062

AUTHOR: Zhukov, V. V.

ORG: None

TITLE: The part played by diffusion mobility of α' -phase components in the process of coagulation of the particles in this phase

SOURCE: Kazan. Aviatsonnyy institut. Trudy, no. 70, 1962. Aviatsonnaya tekhnologiya i organizatsiya proizvodstva (Aviation engineering and organization of production), 53-62

TOPIC TAGS: phase analysis, alloy steel, metal diffusion, coagulation, *HARDENING*

ABSTRACT: The author considers the overall pattern of coagulation of particles in the hardening phase in alloys based on nickel, where the difference in diffusion mobility of the alloy components which make up the segregation phase is extremely important. Analysis of data for increase in the average effective diameter of α' -phase particles during protracted aging of EI437 alloy shows that the increase in size of the particles at all aging temperatures takes place considerably in advance of the reduction in the lattice constant of the solid solution due to particle coagulation. A formula is derived for determining the size of the particles in terms of the duration of isothermal holding. Calculations using this formula show satisfactory agreement with experimental

Card 1/2

ACC NR: AT6014328

data. The formula is used as the basis for derivation of a diffusion equation for EI437 alloy and it is shown that the aluminum atoms in this alloy have the highest diffusion mobility followed by titanium and chromium. Thus the effect of temperature on the rate of increase in particle diameter during the first period of coagulation in the α' -phase is determined basically by the diffusion constants for aluminum, and the activation energy in the diffusion equation is close to that of aluminum. The results of this study indicate that coagulation of the particles in the segregation phase during decomposition of the supersaturated solid solution is a complex diffusion process where the difference in the diffusion mobility of the components making up the segregation phase or dissolved in it play the decisive part in changing the chemical composition of the coagulating particles. Orig. art. has: 4 figures, 17 formulas.

SUB CODE: 11, 20/ SUBM DATE: 15Oct61/ ORIG REF: 012/ OTH REF: 002

Card 2/2

IL'IN, Boris Afanas'yevich, dots., kand. tekhn. nauk; ALYSHEV, I.F., dots., kand. tekhn. nauk, otv. red.; DMITRIYEV, A.A., retsenzent; ZHUKOV, V.V., dots., kand. tekhn. nauk, retsenzent; VASIL'YEVA, N.V., red.

[Theory of the design of forest roads; manual for students of the Forestry-Engineering Department] Teoriya proektirovaniya lesovoznykh dorog; uchebnoe posobie dlia studentov lesoinzhenernogo fakul'teta. Leningrad, Vses. zaochnyi lesotekhn. in-t. Pt.2. 1964. 341 p. (MIRA 18:7)

ZHUKOV, V.V., kand. tekhn. nauk

Design of units for vibratory application of plastic coatings.
Vest. mashinostr. 45 no.5:38-41 My '65. (MIPA 18:6)

ZHUKOV, V.V., kand. tekhn. nauk

Characteristics of the burning out of a thick coal seam in the Angren deposit, and the loosening of the rock massif. Trudy VNIIPodzemgaza no.13:35-42 '65. (MIRA 18:8)

1. Laboratoriya konstruktsey podzemnykh gazogeneratorov Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

ZHUKOV, V.V.

Role of the diffusion mobility of the components of β' -phase in
the coagulation process of its parts. Trudy KAI no. 70:53-62 '62.
(MIRA 18:4)

ZHUKOV, V.V. [Zhukau, U.V.]

Stages of the formation of the sedimentary cover on the Strel-
cheskaya and Petrikovsko-Shestovichskaya areas of the Pripet
fault. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.4:86-90 '64.
(MIRA 18:3)

ZHUKOV, V.V., kand.tekhn.nauk

Investigating the parameters of the application of polycaprolactam
coatings. Vest.mashinostr. 44 no.12:42-44 D '64.

(MIRA 18:2)

TURCHANINOV, Igor' Aleksandrovich; ZHUKOV, V.V., kand. tekhn.
nauk, otv. red.

[Displacement and pressure of rock in the mining of
steeply pitching seams] Sdvizhenie i davlenie gornyykh
porod pri razrabotke krutopadaiushchikh zhil. Moskva,
Nauka, 1965. 93 p. (MIRA 18:6)

ZHUKOV, V.V., kand. tekhn. nauk

Preliminary results of studying the disturbance of the rock massif during the coal mining of seams of the Angren deposit in sections of various thickness. Nauch. trudy VNIIPodzemgaza no. 10: 77-82 '63. (MIRA 17:5)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

ZHUKOV, V.V.

Kinetics of the formation of a stable phase in nickel-titanium
alloys. Trudy KAI no.74:11-15 '63. (MIRA 17:2)

SMIRNOV, V.G.; ZHUKOV, V.V., kand. tekhn. nauk

Ways of improving drilling technology and borehole construction of underground gas producers of the Angren Station
"Podzemgaz." Nauch. trudy VNIIPodzemgaza no.9:91-97 '63.

(MIRA 16:11)

1. Laboratoriya napravlennoy bureniye i laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

BORISOV, Aleksey Alekseyevich, prof., doktor tekhn. nauk; AVERSHIN, S.G., akademik, retsenzent; ZHUKOV, V.V., kand. tekhn.nauk, otv.red.; SMIRENSKIY, M.M., red.izd-va; IL'INSKAYA, G.M., tekhn. red.

[Calculation of rock pressure in longwalls of flat seams]
Raschety gornogo davleniya v lavakh pologikh plastov. Moskva, Izd-vo "Nedra," 1964. 277 p. (MIRA 17:4)

1. Akademiya nauk Kirgizskoy SSR (for Avershin).

BOYKO, A.A., inzh.; DRUKOVANYI, M.F., kand. tekhn. nauk; BABOKIN, I.A., inzh.; ZAYTSEV, A.P., inzh.; POLESIN, Ya.L., inzh.; SOBOLEV, G.G., inzh.; ZHUKOV, V.V., kand. tekhn. nauk; TOPCHIEV, A.V., prof.; VEDERNIKOV, V.I., kand. tekhn. nauk; OKHRIMENKO, V.A., kand. tekhn. nauk; MELAMED, M.Z., kand. tekhn. nauk; KUZNETSOV, K.K., inzh.; RABINOVICH, I.A.; YASNIY, V.K., inzh.; LIVSHITS, I.I., kand. tekhn. nauk, ressenzent; BARANOV, A.I., inzh., ressenzent; LOMILINA, L.N., tekhn. red.

[Brief handbook of a coal mining engineer] Kratkii spravochnik gornogo inzhenera ugol'noi shakhty. Moskva, Gosgortekhnizdat, 1963. 639 p. (MIRA 17:3)

ZHUKOV, V.V., inzh.

Methods in coating metal surfaces with plastics. Tekhnika
Bulg 12 no.6:25-28 '63.

ACCESSION NR: AP3000117

S/0122/63/000/005/0048/0051

AUTHOR: Zhukov, V. V. (engineer)

TITLE: Methods for coating metals with plastics

SOURCE: Vestnik Mashinostroyeniya, no. 5, 1963, 48-51

TOPIC TAGS: metal coating, coating device, plastic sprayer, metal coating with plastic, plastic coating, plastic spraying device, flame spraying, eddy flow coating, vibration coating

ABSTRACT: The article explains different procedures followed in spraying metal surfaces with plastics and describes the working principles of three devices employed in this work. The devices are shown in Figs. 1, 2 and 3 of the Enclosures. Plastic materials most commonly used in the process of flame coating, eddy-flow coating, and vibration coating are the polyamide tars P-68 and AK-7. In the present experiments these materials were powdered (200-250 microns) and dried. Their maximum allowable moisture content was 0.2%. All three methods required preliminary heating of the metal surface to temperatures exceeding the melting temperatures of the plastic powders. The flame spraying consisted of heating metal surfaces by an air-acetylene burner to the required temperature. A mixture of air and plastic

Card 1/52

ACCESSION NR: AP3000117

powder was passed through the burner and was deposited on the hot metal surfaces. The eddy-flow coating consisted of submerging a hot metal part in a chamber with plastic powder kept in suspension by eddy currents of air. The vibration method was based on the ability of powdered plastics to flow under the action of vibration. Orig. art. has: 1 table and 8 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 14Jun63

ENCL: 03

SUB CODE: ML

NO REF SOV: 005

OTHER: 005

Card 2/52

ZHUKOV, V.V.; NILOV, A.A.

X-ray diffraction study of the surface layer of some heat
resistant alloys after heat treatment in various gas media.
Trudy KAI no.66:111-116 '61. (MIRA 16:10)

(Heat resistant alloys--Testing)
(X-ray diffraction examination)

ZHUKOV, V.V., inzh.

Use of laminated plastic coatings in sleeve bearings.

Mekh. stroi. 19 no.10:26-28 0 '62.

(MIRA 15:12)

(Bearings (Machinery))

(Plastics)

ZHUKOV, V.V., inzh.

Methods for coating metal surfaces with plastics. Vest.mashinostr.
43 no.5:48-51 My '63. (MIRA 16:5)
(Plastics) (Protective coatings)

ZHUKOV, V.V.

Dynamics of the regeneration process in experimental
glomerulonephritis. Sbor.trud.Inst.khir.AMN SSSR no.1:84-99
'62. (MIRA 16:1)

(KIDNEYS--DISEASES) (REGENERATION(BIOLOGY))

ZHUKOV, V.V., kand.tekhn.nauk

Studying the fracturing of the coal bed of the Angren deposit.
Nauch.trudy VNIIPodzemgaza no.7:51-61 '62. (MIRA 15:11)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.
(Angren Basin--Coal geology) (Coal gasification, Underground)

ZHUKOV, V.V., kand.tekhn.nauk

Effective means of checking the condition of the casing columns
of the holes of underground gas producers. Nauch.trudy VNIIPodzemniza
no.7:69-73 '62. (MIRA 15:11)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno- issledo-
vatel'skogo instituta podzemnoy gasifikatsii ugley.
(Coal gasification, Underground--Equipment and supplies)
(Industrial television)

ZHUKOV, V. V.

Vibratory method for coating with plastics. Mashinostroitel'
no.10:30-31 0 '62. (MIRA 15:10)

(Plastic films)

ZHUKOV, V.V.

Methods for precise determination of lattice periods from
asymmetric roentgenograms. Zav.lab. 28 no.5:590-592 '62.
(MIRA 15:6)

1. Kazanskiy aviatsionnyy institut.
(Crystal lattices) (Radiography)

SONIN, Semen Danilovich; VOBOB'YEV, Boris Mikhaylovich; ZHUKOV, V.V., otv. red.; SMIRENSKIY, M.M., red. izd-va; MINSKER, L.I., tekh. red.

[Technological flow charts of rock disposal in mines] Tekhnologicheskie skhemy razmeshcheniya porody v shakhte. Moskva, Gosgortekhnizdat, 1961. 161 p. (MIRA 15:10)
(Mine filling)

GLAGOLEV, Viktor Artem'yevich; ZHUKOV, Vasolod Vasil'yevich; BOYKO, A.A., red.; OKHRIMENKO, V.A., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Technical principles of the mining and fuel industry] Osnovy tekhnologii gornorudnoi i toplivoi promyshlennosti. Pod red. A.A.Boiko. Moskva, Gosgortekhzdat, 1962. 382 p.

(MIRA 15:9)

(Mineral industries)

158080.

40716

S/122/62/000/009/002/001
A006/A101

AUTHOR: Zhukov, V. V., Engineer

TITLE: Some properties of filled polyamides

PERIODICAL: Vestnik mashinostroyeniya, no. 9, 1962, 48 - 52

TEXT: Some examples are given which show that the quality of polyamides can be improved by the addition of various fillers. Literature data available on this subject are incomplete or contradictory. Therefore the author studied under the supervision of Dotsent B. N. Bogolyubov, Candidate of Technical Sciences, the effect of fillers upon physico-mechanical properties of polyamides. Samples were manufactured of a mixture of polycarpolactam with MoS_2 , CdI_2 and BaSO_4 . The effect of the fillers was determined from changes in antifriction properties, specific toughness, hardness and water absorption. The tests show that the aforementioned fillers increase the wear resistance and hardness of polyamides and reduce their water absorption capacity and toughness. Considering the sharp decrease in toughness of polyamides filled with MoS_2 and CdI_2 , the content of these fillers should be established by taking into account the dynamic load. The filler may be added to the polyamides during the synthesis of polyamide resins (at the producing plants).
Card 1/2

Some properties of filled polyamides

S/122/62/000/009/002/007
A006/A101

by introduction into molten resins, and by mixing them with the polyamides in powder form, and subsequent melting. There are 6 figures and 1 table.

Card 2/2

KRASNIKOVSKIY, G.V., prof., red.; MALYSHEV, A.S., red.; VOROB'YEV, B.M., dots., kand. tekhn. nauk, red.; KAIMYK, M.K., gornyy inzh., red.; ZHUKOV, V.V., kand. tekhn. nauk, otv. red.; SMIRENSKIY, M.M., red. izd-va; SABITOV, A., tekhn. red.

[Problems in mining engineering; collected articles on the occasion of the 70th birthday of Professor S.D.Sonin] Voprosy gornogo dela; sbornik statei, posviashchenyi 70-letiiu so dnia rozhdenia professora S.D.Sonina. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1962. 402 p. (MIRA 15:5)

1. Zaveduyushchiy kafedroy razrabotki plastovykh mestorozhdeniy Moskovskogo gornogo instituta (for Krasnikovskiy). (Sonin, Semen Danilovich, 1891--) (Coal mines and mining)

S/032/62/028/005/004/009
B163/B102

AUTHOR: Zhukov, V. V.

TITLE: A method for the precise determination of lattice constants from asymmetric roentgenograms

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 5, 1962, 590-592

TEXT: Microphotometer records of Debye-Scherrer diagrams are evaluated by means of a graduated scale on which the position of the reference lines of the calibration substances are marked; the lattice constant of the material to be investigated can be directly read from the position of its diffraction line. The method and the calculation of the graduated scale are illustrated in detail in respect of a lattice constant determination of a Nimonic alloy where the (024)-lines of diffraction patterns taken with the CuK_α doublet are evaluated with nickel as reference substance. In this case the maximum error of the lattice constant determination is $\pm 4 \cdot 10^{-12}$ cm. The method is further applied to measure the variation of the lattice constant in a solid solution of the ЭИ437 (EI437) alloy during ageing at various temperatures. There are 3 figures.

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A method for the precise...

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ASSOCIATION: Kazanskiy aviatsionnyy institut (Kazan' Aviation Institute)

Card 2/2

ZHUKOV, V.V.

Performance of vaults made of heat-resistant concrete under
high temperature and loading. Prom. stroi. 39 no.5:46-49 '61.
(Vaults) (Refractory concrete—Testing) (MIRA 14:7)